

Attachment G



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,306	12/03/2003	Douglas B. Wilson	114089.121	5202

23483 7590 05/13/2010
WILMERHALE/BOSTON
60 STATE STREET
BOSTON, MA 02109

EXAMINER

LUONG, VINH

ART UNIT	PAPER NUMBER
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3656

NOTIFICATION DATE	DELIVERY MODE
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05/13/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

teresa.carvalho@wilmerhale.com
whipusptopairs@wilmerhale.com

Office Action Summary	Application No.	Applicant(s)	
	10/727,306	WILSON, DOUGLAS B.	
	Examiner	Art Unit	
	Vinh T. Luong	3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2010.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-28 is/are pending in the application.
- 4a) Of the above claim(s) 20-23, 25/20, 26, 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19, 24, 25/14, 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input checked="" type="checkbox"/> Other: <u>Appendix</u> |
|---|--|

1. The amendment filed on February 24, 2010 has been entered.
2. Claims 20-23, 25/20, 26, and 28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on January 30, 2006.
3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter, such as, "an upper one-half (1/2)" in claim 14. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction is required.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 14-19, 24, 25/14, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Shigeru (JP 4-78769 cited by Japanese Patent Office in the IDS in copending Application No. 10720821).

Claim 14

Shigeru teaches a fatigue relieving/preventing apparatus associated with a steering wheel 2 for controlling a vehicle, comprising:

a first section (at a' in FIG. 2, see Appendix hereinafter "App." that connects to *an upper one-half* of a peripheral portion of the steering wheel 2; and

a rigid, semi-rigid or flexible, or deformable second section (at 1 in FIG. 2, see App.) that connects to and extends from the first section (App.) at the peripheral portion of the steering wheel 2, the second section (App.) extends from the first section (App.) outward at an angle (see angle α in Fig. 4 in App.) to a plane (App.) across a front face of the steering wheel 2, the second section (App.) for providing resting support for at least a portion (e.g., a hand) of a vehicular

Art Unit: 3656

operator's body when pressure from the portion of the vehicular operator's body on the second section (App.) is less than the pressure for deforming the second section (App.) out of interference with the vehicular operator's ability to operate the steering wheel 2, and deforming out of interference with the vehicular operator's ability to operate the steering wheel 2 when pressure from the portion of the vehicular operator's body on the second section (App.) is equal to or greater than the pressure for deforming the second section (App.) out of interference with the vehicular operator's ability to operate the steering wheel 2. (Shigeru, pp. 2-4 of translation)

Claim 15

The steering wheel 2 includes a steering wheel 2 for controlling at least a nautical vessel, aircraft, or ground transportation vehicle.

Claim 16

The portion of the body supported by the second section includes at least a forearm, wrist, or hand. (Shigeru, abstract)

Claim 17

The first section (App.) extends a length of a predetermined peripheral portion of the steering wheel 2.

Claim 18

The second section (App.) includes at least two second sections (*i.e.*, a first second section and a second second section in App.) that each connected to the first section (App.) at separate locations as seen in FIG. 1.

Claim 19

The first section (App.) is deformable since it is made of a cushion material 8, 9, such as, light weight plastic. (Shigeru, pp. 3 and 4 of translation). On the other hand, “deformable” is a relative term, particularly since virtually anything will be deformed if enough pressure is applied to it. See “flexibility” and “rigidity” in *Fredman v. Harris-Hub Co., Inc.*, 163 USPQ 397 (DC 1969)

Claim 24

Each first section (App.) is formed integral with the steering wheel 2. It is well settled that the term “integral” is sufficiently broad to embrace construction united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973) and *In re Morris*, 43 USPQ2d 1753, 1757 (CAFC 1997).

Claim 25/14

Each first section (App.) is detachable from the steering wheel 2. (Shigeru, p. 3 of translation)

Claim 27

The first section (App.) is flexible, rigid, or semi-rigid, or non-deformable. (Shigeru, pp. 3 and 4 of translation. *Fredman v. Harris-Hub Co., Inc., supra*.

6. Applicant's arguments filed February 24, 2010 have been fully considered but they are not persuasive.

The previous rejections are withdrawn in view of Applicant's amendments to the claims. Applicant's arguments with respect to claims 14-19, 24, 25/14, and 27 have been considered but are moot in view of the new ground(s) of rejection.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vinh T. Luong whose telephone number is 571-272-7109. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vinh T Luong/
Primary Examiner, Art Unit 3656

Notice of References Cited	Application/Control No. 10/727,306	Applicant(s)/Patent Under Reexamination WILSON, DOUGLAS B.	
	Examiner Vinh T. Luong	Art Unit 3656	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP 4-78769	03-1992	Japan	Shigeru	B62D 1/04
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	PTO 10-3326, Translation of JP 4-78769, Shigeru, 3/12/1992.
	V	English abstract of JP 4-78769, Shigeru, 3/12/1992.
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

PAT-NO: JP404078769A
DOCUMENT-IDENTIFIER: JP 04078769 A
TITLE: S,C TYPE STEERING WHEEL
SUPPORT
PUBN-DATE: March 12, 1992

INVENTOR-INFORMATION:

NAME	COUNTRY
SENDAI, SHIGERU	

ASSIGNEE-INFORMATION:

NAME	COUNTRY
SENDAI SHIGERU	N/A

APPL-NO: JP02189403
APPL-DATE: July 19, 1990

INT-CL (IPC): B62D001/04 , G05G001/10

ABSTRACT:

PURPOSE: To reduce fatigue of driver's hands by moving a support along a fixing groove in a steering wheel, and fixing the support on the outer periphery of the steering wheel to make the hands stable.

CONSTITUTION: A groove 3 for metal fitting 6 is formed in a steering wheel 2 to fit the metal fitting 6 of a support 1 into it and slide the

support 1 along the outer periphery of the steering wheel, setting a lever 5 to a groove 7 in the support at the driver's most preferable hand position. When the driver wants to change the position, he can pull the lever 5 horizontally to release fixing and move to the other position and fix it. It is thus possible to reduce hands' fatigue by fixing the hands on the outside of the steering wheel 2 when hands go upwards and downwards or do not settle due to their fatigue during driving.

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⑪ 公開特許公報(A) 平4-78769

⑫ Int. Cl.

B 62 D 1/04
G 05 G 1/10

識別記号

庁内整理番号
9142-3D
8009-3J
A

⑬ 公開 平成4年(1992)3月12日

審査請求 未請求 請求項の数 2 (全3頁)

⑭ 発明の名称 S, C型ハンドル, サポート.

⑮ 特 願 平2-189403

⑯ 出 願 平2(1990)7月19日

⑰ 発 明 者 千 代 茂 神奈川県川崎市中原区苅宿157番地1号 月住吉団地12号棟33号

⑱ 出 願 人 千 代 茂 神奈川県川崎市中原区苅宿157番地1号 月住吉団地12号棟33号

明 細 書

1. 発明の名称.

S, C型ハンドル, サポート.

2. 特許請求の範囲.

1. サポート1はハンドル2の固定溝3に沿って移動し、レバー5と金具6の作用により自由な場所に固定が出来る。ハンドル2の外周の部分にサポート1を固定させる事によって手を安定させ、ドライバーの手の疲れを軽減するサポート1の発明である。

2. サポート1をハンドル2にバンド11又はU字型の金具12を使って固定をする、この場合サポート1をハンドル2の外周から締め付ける為にハンドルの固定溝3は必要としない。

3. 発明の詳細な説明.

従来型のハンドルに金具6用の溝3を切り、サポート1の

金具6を入れサポート1をハンドルの外周に沿ってスライドさせ、自分の一番好きな手の位置にレバー5をサポートの溝7にセットをする。位置を変えたい時はレバー5を横に引き固定を解除し、他の場所に移動し固定できる。さらに必要が無いと思われる時はレバー5を引きハンドル2の上部に金具出入り口4が有り、自由に取はず事が可能で有る。

請求の範囲2はサポート1の固定方法が違いハンドル2へ外部よりバンド11やU字型の金具12などを使いレバーやナット等で締め付ける方法で有る。

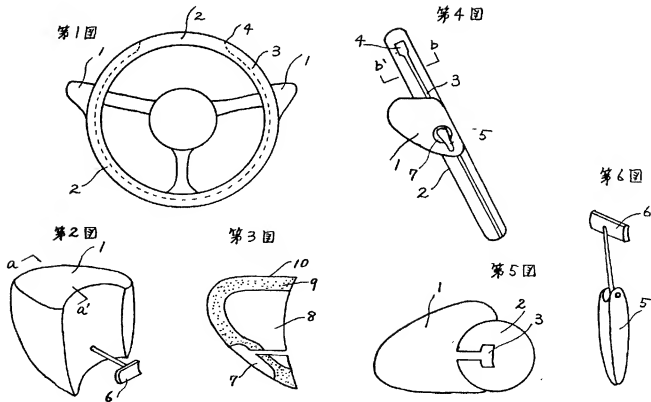
サポート1の内部構造は第3図の様に成型部分8は軽量のプラスチック、その上にクッション材9で覆い手の当たる部分の疲れをやわらげる、表面材10は布又は革で出来て

いて手の滑りを出来る限り少なくする。ハンドル2の前面よりサポート1は前に出ず事故による衝突事にも、ハンドル2より先に体が接触する事はない。なおかつ殆どの部分が曲面で形成されハンドル2に固定した時は全面的に柔らかなクッション9で覆われている為、人体に対しての安全性も高いと思われる。車を運転中に手が上方(10時10分)や下方(4時20分)になったり手が疲れによって定まらなかった、これによりハンドル2の外側に乗せて固定すれば手の疲れが少なく済み運転に集中が出来る。

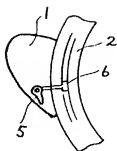
本発明はハンドル2に溝3を設けハンドル2の外周の外側にサポート1を固定させ、又は締め付け金具などにより固定する事によってドライバーの手の疲れを少なくする発明である。

4. 図面の簡単な説明

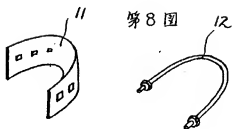
第1図はサポート1とハンドル2の全体図、第2図はサポート1の立体図、第3図はサポート1のa-a'断面図、第4図はサポート1とハンドル2の側面図、第5図はb-b'断面図、第6図はレバー5と金具6の立体図、第7図はサポート1とハンドル2とレバー5と金具6の取り付け図、第8図はバンド11とU字型金具12の図面、13はボス分部、14はスポーク。



第7圖



第8圖



and U-shaped metal fitting 12. 13 is a boss part, and 14 is a spoke.

Fig. 1

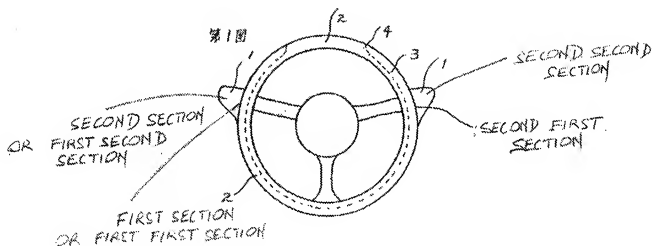
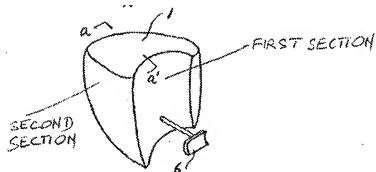


Fig. 2



APPENDIX

Fig. 3



Fig. 4

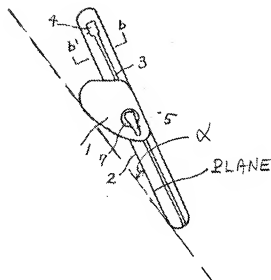


Fig. 5



APPENDIX

PAGE 2 OF 2

PTO 10-3328

CC=JP
DATE=19920312
KIND=A
PN=04078769

S,C TYPE STEEL WHEEL SUPPORT

[S,C-GATA HANDORU SAPŌTO]

SHIGERU SENDAI

UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. APRIL 2010
TRANSLATED BY: SCHREIBER TRANSLATIONS, INC.

PUBLICATION COUNTRY	(10):	JP
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DOCUMENT KIND	(12):	A
PUBLICATION DATE	(43):	19920312
APPLICATION NUMBER	(21):	02189403
APPLICATION DATE	(22):	19900719
INTERNATIONAL CLASSIFICATION	(51):	B 62 D 1/04 G 05 G 1/10
PRIORITY COUNTRY	(33):	N/A
PRIORITY NUMBER	(31):	N/A
PRIORITY DATE	(32):	N/A
INVENTOR(S)	(72):	SHIGERU SENDAI
APPLICANT(S)	(71):	SHIGERU SENDAI
DESIGNATED CONTRACTING STATES	(81):	N/A
TITLE	(54):	S,C TYPE STEERING WHEEL SUPPORT
FOREIGN TITLE	(54A):	S,C-GATA HANDORU SAPÔTO

SPECIFICATION

I. Title of the Invention

S,C TYPE STEERING WHEEL SUPPORT

II. Scope of Patent Claims

1. An invention of support 1 wherein support 1 can be moved along a fixing groove of steering wheel 2 and fixed to a free place by the action of lever 5 and metal fitting 6 to make the hands stable by fixing support 1 to the outer periphery of steering wheel 2 and reduce fatigue of driver's hands.

2. A support 1 fixed to steering wheel 2 with band 11 or U-shaped metal fitting 12 wherein a fixing groove 3 of the steering wheel is not needed to fasten support 1 from the outside of steering wheel 2.

III. Detailed Description of the Invention

Groove 3 for metal fitting 6 is cut in a conventional steering wheel, metal fitting 6 of support 1 is fit into it in order to slide support 1 along the outer periphery of the

¹Numbers in the margin indicate pagination in the foreign text.

steering wheel, and lever 5 is set into groove 7 of the support at the most preferable position of the driver's hands. When a driver wants to change the position, he/she can pull lever 5 horizontally to release the fixing, and then can move the lever to another place and fix it. When the driver thinks that the change is unnecessary, he/she draws the lever 5 to the upper part of steering wheel 2 having a metal fitting inlet/outlet 4 to make it possible to freely remove the metal fitting.

Claim 2 is a method that is different with respect to the fixing method of support 1 wherein support 1 is fastened to steering wheel 2 from the outside with a lever or a nut by using a band 11 or U-shaped metal fitting 12.

In the internal structure of support 1, molded part 8 is a light-weight plastic and relieves fatigue of a portion of the hands in contact with the cushion material thereon by covering the hands. A surface material 10 can be made with a cloth or with leather

/2

in order to reduce slipping of the hands as much as possible as shown in Fig. 3. Support 1 does not come into contact with the body earlier than steering wheel 2 in a collision due to an accident happening in front of steering wheel 2; almost all parts are formed into curved surfaces and are covered all over

with flexible cushion 9 when they are fixed to steering wheel 2. Therefore, the safety for the human body is thought to be high. When a vehicle is running, the hands are in the upper part (10 min past 10 o'clock) or in the lower part (20 min past 4 o'clock) and do not settle due to fatigue; thereby, if the support is placed on the outer side of steering wheel 2 and is fixed, hand fatigue is reduced so that the driver can concentrate on driving.

The present invention is an invention wherein groove 3 is provided in steering wheel 2, support 1 is fixed to the outer side of the periphery of steering wheel 2 or fixed with a fastening metal fitting or the like, and thereby the hand fatigue of a driver is reduced.

IV. Brief Description of the Drawings

Fig. 1 is a general diagram of support 1 and steering wheel 2, Fig. 2 is a space diagram of support 1, Fig. 3 is an a-a cross-sectional view of support 1, Fig. 4 is a side view of support 1 and steering wheel 2, Fig. 5 is a b-b cross-sectional view, Fig. 6 is a space diagram of lever 5 and metal fitting 6, and Fig. 7 is a drawing for installing support 1, steering wheel 2, lever 5 and metal fitting 6. Fig. 8 is drawings of band 11

and U-shaped metal fitting 12. 13 is a boss part, and 14 is a spoke.

Fig. 1

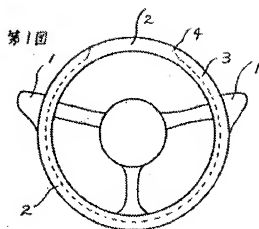


Fig. 2

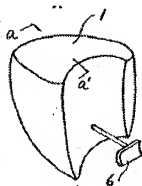


Fig. 3

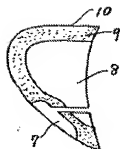


Fig. 4

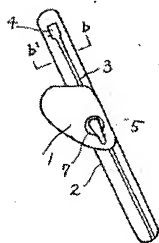


Fig. 5

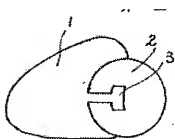


Fig. 6



/3

Fig. 7

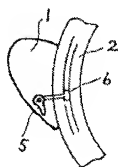


Fig. 8

